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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,239	10/13/2004	Motohiro Shimaoka	9281-4983	1830

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EXAMINER

BOATENG, ALEXIS ASIEDUA

ART UNIT	PAPER NUMBER
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2838

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,239

Applicant(s)

SHIMAOKA ET AL.

Examiner

Alexis Boateng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7,9,11,13,15,17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7,9,11,13,15,17, and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5, 7, 9, 11, 13, 15, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (U.S. 5,744,933) in view of Kobayashi (U.S. 4,556,837) and in further view of Fernandez (U.S. 6,184,651).

Regarding claim 1, Inoue disclose wherein a charging apparatus (figure 1 item 1) comprising a housing (figure 1 item 1) having an opening at one side (figure 3 item 16a); an openable supported door for shutting the opening of the housing (figure 1 item 7); and chargers for charging at least one object to be charged in the housing (figure 3 item 17). Inoue discloses the invention as previously claimed, but does not disclose the remainder. Kobayashi discloses in figure 5 wherein items L11a-d are a plurality coils or chargers, that are surrounding the device. Kobayashi discloses in figure 2, wherein the chargers, item 200, non-contactly supply electric power by electromagnetic induction from built-in coils, item L11, of power feeders to said at least one object, item 100, having a built-in coil, item L21; of a power receiver and a built-in battery, item BT. Kobayashi discloses in column 6 line 63 – column 7 line 27 wherein the high frequency signals are sent from an IC chip, figure 3 item CPU, having a oscillator, item

108. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Inoue system with the Kobayshi system so that the charging system can charge a wide variety of appliances and is not limited by different input terminals on a device. Inoue and Kobayashi disclose the invention as previously claimed, but do not disclose the remainder. Fernandez discloses in figure 3 item 37 wherein an antenna is used to transmit frequency data signals. Fernandez further discloses a circuit for controlling chargers, item 47, around the object according to the data signals received by the antenna so as to drive a charger sending electromagnetic waves to the object. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Inoue and the Kobayashi system with the Fernandez system so that the charging process and transfer of charging energy is improved.

Regarding claim 3, Inoue discloses wherein the charging apparatus comprising at least one shelf in the housing for receiving the object wherein the chargers for charging objects placed on the shelf and/or on the inner face of the bottom of the housing are provided to the shelf and/or the housing (figures 1 and 15 show multiple rows).

Regarding claims 5, Inoue discloses wherein at least one standing partition on said at least one shelf and/or on the inner face of the bottom of the housing for partitioning the shelf and/or the inner face of the bottom of the housing into a plurality of spaces, wherein the object is placed at the space partition by the partition (figure 3 item 3).

Regarding claims 7, Inoue discloses wherein at least one of the charger is provided on said at least one partition (figure 3 item 17). Kobayashi discloses in figure 5 a plurality of power transmitting coils, items L11a-f disposed in a surround relation to the container. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Inoue system with the Kobayashi system so that the charging container can charge a wide variety of devices and is not limited by charger size.

Regarding claims 9, 11, and 13, Inoue discloses wherein the housing includes a shielding body for shielding the outside from the electromagnetic waves generated by the electromagnetic induction. It is obvious that the material that the vending machine is made from a metal that may act as a shield from outside electromagnetic waves. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the system with a metal shield because metal is a strong material and protect the battery inside.

Regarding claim 18, Inoue discloses wherein the object is a secondary battery (column 2 lines 38 – 42), but does not disclose the remainder of the claimed invention. Kobayashi discloses in figure 1 item BT, wherein the object is a secondary battery detachable from an electronic device and having the coil, item L21 of the power receiver. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Inoue system with the Kobayashi system so that battery can easily be charged by the system.

Regarding claims 19, Inoue discloses wherein the object is a portable device (column 2 lines 38 – 42: mobile phone)

3. Claims 15 and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (U.S. 5,744,933) in view of Kobayashi (U.S. 4,556,837) as applied to claim 1 and in further view of Binder (U.S. 6,208,115).

Regarding claims 15 and 17, Inoue and Kobayashi both disclose wherein the object includes a battery, which is obvious that the batteries may be detached from the systems. Kobayashi also discloses a built-in coil, figure 1 item L21. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Inoue system with the Kobayashi system so that different methods of charging can be used. For further clarification, Binder discloses a device wherein the secondary battery is detachable and comprises an adapter with a built-in coil for electromagnetic charging. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Inoue and Kobayashi system with the Binder system so that device can be powered in a variety of different ways and is not limited in its methods of charging.

Response to Arguments

4. Applicant's arguments filed 9/08/06 have been fully considered but they are not persuasive. **Regarding claim 1**, the applicant argues that the Inoue reference fails to disclose a control circuit that drives a charger that sends electromagnetic waves to the

object from an optimal direction. The Inoue system teaches a control circuit that drives a charger that sends magnetic waves, because it is charges devices and electromagnetic induction is merely another form of transferring electric current. It would be obvious to modify this system with a plurality of chargers in order to ensure optimum charging. The applicant further argues that the Kobayashi system fails to disclose a control circuit that drives a charger that sends electromagnetic waves to the object from an optimal direction. The word "optimal" is relative, and Kobayashi and discloses an optimal direction since it is around the cup along the direction of thermometer. The electromagnetic induction provided in the Kobayashi system includes sending electromagnetic waves in an optimal direction because the device lacks current. The applicant further argues that Kobayashi fails to teach a plurality of chargers and a control circuit that drives a charger that sends electromagnetic waves. Kobayashi discloses a CPU in figure 3, which drives the charger to send electromagnetic waves to the device. The applicant continues to argue that the Fernandez reference fails to disclose a control circuit that drives a charger that sends electromagnetic waves to the object from an optimal direction. Although Fernandez only discloses a single charger, the charging process is the same as the applicants and charges the battery via electromagnetic waves from an optimal direction, as disclosed in column 3 lines 59 – 60.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis Boateng whose telephone number is (571) 272-5979. The examiner can normally be reached on 8:30 am - 6:00 pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gary L. Laxton
Primary Examiner
Art Unit 2838

11/22/2006

AB